

Stoke Gabriel Primary

Maths Curriculum Plan EYFS

Intent

At Stoke Gabriel we believe that EYFS is crucial in securing early mathematical foundations that children will build on. Each child is offered varying opportunities to reach their full mathematical potential through taking account of each child's starting point, carefully developing a flexible maths curriculum that enables each child to follow the path that their learning journey takes in a way that is suitable for their unique needs and stage of development.

Number

By the end of the EYFS we aim for all children to be 'curious' mathematicians and have a love of maths. They will be able to:

- Work confidently with numbers to 20 (understanding the number sense of each number)
- Say /find the number that is one more/less than all numbers to 20
- Understand concepts of addition and subtraction- working practically to solve problems by counting on/back
- Understand and explore concepts of doubling, halving and sharing

Shape, Space and Measure

By the end of the EYFS children will:

- * Have a solid understanding of the key concepts and vocabulary related to size, weight, capacity, position, distance, time and money.
- * Be able to make comparisons, solve problems and explore characteristics of objects and everyday shapes and use mathematical language to describe them.

Implementation

A rich vocabulary: thinking and talking like an expert...

Children will be introduced to vocabulary in all of the following maths topics

Number names /Addition/Subtraction/ Doubling/Halving/Capacity/Weight/Length/Money/Time/Shape/Position

We explicitly teach and use of key vocabulary, which is crucial to mathematical understanding, including visual displays on maths wall and in other areas of provision. This can be found in detailed maths planning.

In EYFS we use White Rose Maths Hub materials to support teaching and learning, alongside our school calculation policy.

A detailed, structured curriculum is mapped out across EYFS ensuring knowledge and understanding will be built on in a progressive way throughout the year. This includes the following:

- Key child friendly phrases are used, such as 'careful counting', 'cup of tea numbers' (when learning to count in 10s later in the year).
- STEM sentences are modelled and reinforced with actions. These are then used by the children.
- Misconceptions are identified and addressed (individually and as a whole group).

•Opportunities for children to use language and vocabulary in their chosen provision activities are provided/developed through careful observations, and where appropriate with questioning, to ensure mathematical concepts are fully embedded and consolidated. Our planning ensures we fully develop independent learners with inquisitive minds who have secure mathematical foundations.

The EYFS

Early Years Foundation Stage-

Number sense- Children need to ‘immerse’ themselves in numbers in order to develop a deep ‘number sense’. They need to understand the ‘ness’ of numbers, e.g. what makes six six? We spend time learning all about and familiarising ourselves with each number; the numeral, the value (in different representations, both mathematical and non-mathematical), subitising, composing and decomposing the number. This early immersion in number supports the children’s understanding of the place value of numbers, together with early understanding of the concepts of more/less, addition and subtraction.

Characteristics of Effective Learning - underpins the EYFS– ‘Creating and thinking critically’: through both adult- led and child- initiated tasks children will be encouraged to make links, find new ways of doing things, solve problems. Higher order thinking happens when children seek out challenges and take risks in their learning.

Enabling Environments -We provide a ‘numeracy rich environment’ where there is a balance between both adult led learning and child- initiated experiences. Adult led activities should take account of children’s interests and learning styles, maximising the use of the areas of provision, both indoors and outdoors. Careful planning and resourcing is key to the best possible learning outcomes. Many of the planned adult led activities can then be further explored by children (independently) to develop their mathematical skills and consolidate their understanding. Embedding mathematical learning opportunities within daily routines makes it real and purposeful. Number work is ‘threaded’ through our days where there are plenty of opportunities to count for purpose (e.g. register time, snack time), use number rhymes and share stories. It is important that we jump on those ‘spontaneous’ opportunities for learning too! All staff who work within the EYFS are ‘trained’ to ensure they are able to support and develop the children’s mathematical learning. This process includes: use of the correct vocabulary, terminology, careful questioning, carrying out purposeful observations, being aware of the children’s next steps.

Progressive curriculum plan

Area of mathematics –Number and Place Value	30-50 months	40-60+ months	ELG
Counting	-To recite numbers in order to 10. -To realise not only objects, but anything can be counted including steps, claps or jumps.	-To count up to three or four objects by saying one number name for each item.	-To count reliably with numbers from one to 20.

		-To count out up to six objects from a larger group. -To count actions or objects which cannot be moved. -To count objects to 10 and beginning to count beyond 10. -To count an irregular arrangement of up to ten objects. -To estimate how many objects they can see and check by counting them.	
Identifying, representing & estimating numbers	-To use some number names and number language spontaneously. -To know that numbers identify how many objects are in a set. -To show an interest in representing numbers. -To begin to represent numbers using fingers, marks on paper or pictures. -To separate a group of three or four objects in different ways, beginning to recognise that the total is still the same. -To sometimes match numeral and quantity correctly	-To select the correct numeral to represent 1 to 5, then 1 to 10 objects. -To say the number that is one more than a given number. -To find one more or one less from a group of up to five objects, then ten objects.	-To say which number is one more or one less than a given number from one to 20.
Reading & writing numbers	-To show an interest in numerals in the environment. -To use some number names accurately in play.	-To recognise some numerals of personal significance. -To recognise numerals 1 to 5.	
Comparing & ordering numbers	-To compare two groups of objects, saying when they have the same number.	-To use the language of 'more' and 'fewer' to compare two sets of objects.	-To place numbers one to 20 in order.
Understanding place value	-To show curiosity about numbers by offering comments or asking questions.		
Solve problems	-To show an interest in number problems.	-To begin to identify own mathematical problems based on own interests and fascinations	

Area of Mathematics- Addition & Subtraction	30-50 months	40-60+ months	ELG
Mental calculations		-To find the total of items in two groups by counting all of them. -To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion.	-To add and subtract two single-digit numbers and count on back to find the answer using quantities and objects.
Solve problems			-To solve problems, including doubling, halving and sharing.

Area of mathematics -Measurement			
Describe, measure, compare & solve (all strands)		-To order two or three items by length or height. -To order two items by weight or capacity.	-To use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and solve problems.
Telling the time		-To use everyday language related to time. -To order and sequence familiar events. -To measure short periods of time in simple ways.	
Money		-To begin to use everyday language related to money.	

Area of mathematics- Properties of Shape	30-50 months	40-60+months	ELG
Recognising 2D & 3D shapes	-To show an interest in shape and space by playing with shapes or making arrangements with objects. -To show interest in shape by sustained construction activity or by talking about shapes or arrangements. -To show interest in shapes in the environment. -To use shapes appropriately for	-To begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. -To select particular named shapes.	-To explore characteristics of everyday objects and shapes and use mathematical language to describe them.

	tasks. To begin to talk about shapes in everyday objects, e.g. 'round' and 'tall'.		
Compare and Classify shapes	-To show awareness of similarities of shapes in the environment.		

Area of mathematics -Position	30-50 months	40-60+months	ELG
Position, direction and movement	-To use positional language.	-To describe their relative position, such as 'behind' or 'next to'.	
Pattern		-To use familiar objects and common shapes to create and recreate patterns and build models.	-To recognise, create and describe patterns.

Area of mathematics-Statistics	30-50 months	40-60+months	ELG
Record, present and interpret data		-To record, using marks that they can interpret and explain.	

Impact

By the end of the EYFS children will be confident and curious mathematicians, they will have a love of maths! The foundations of good number sense will have been laid and key concepts such as more/less, addition, subtraction, doubling, halving and sharing embedded. Children will have a sound knowledge of concepts and vocabulary related to the shape, space and measure elements of Mathematics. They will have the skills they need to be year one ready.