



Breadsall C of E Primary School

Early Years Foundation Stage POLICY DOCUMENT

Mathematics (Specific area of learning)

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Reviewed: September 2021

Next review date: September 2023

We follow the **Early Years Foundation Stage Statutory Framework (2021)** which sets the standards that all early years providers must meet to ensure that children learn and develop well and are kept healthy and safe. It promotes teaching and learning to ensure children's 'school readiness' and gives children the broad range of knowledge and skills that provide the right foundation for good future progress through school and life. The EYFS seeks to provide:

- **Quality and consistency** in all early years settings so that every child makes good progress and no child gets left behind
- **A secure foundation** through planning for the learning and development of each individual child, and assessing and reviewing what they have learned regularly
- **Partnership working** between practitioners and with parents and/or carers
- **Equality of opportunity** and anti-discriminatory practice, ensuring that every child is included and supported

Overarching principles

Four guiding principles shape practice at our school. These are:

- **A Unique Child** : every child is a unique child, who is constantly learning and can be resilient, capable, confident and self-assured
- **Positive Relationships**: children learn to be strong and independent through positive relationships
- **Enabling Environment**: children learn and develop well in enabling environments with teaching and support from adults, who respond to their individual interests and needs and help them to build their learning over time. Children benefit from a strong partnership between practitioners and parents and/or carers.
- **Learning and Development**: Children develop and learn at different rates. In planning and guiding what children learn, we reflect on the different rates at which children are developing and adjust our practice appropriately with due regard to the three **characteristics of effective teaching and learning** which are:
 - playing and exploring - children investigate and experience things, and 'have a go'
 - active learning - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements •
 - creating and thinking critically - children have and develop their own ideas, make links between ideas, and develop strategies for doing things

We recognise that developing an understanding of Mathematics is a vital skill for children's development as it includes essential skills and knowledge for children to participate successfully in society. Children are supported in developing their understanding of Mathematics in a broad range of contexts in which they can explore, enjoy, learn, practice and talk about their developing understanding. They are given opportunities to practise their skills and to gain confidence and competence in their use. We use Power Maths to support Mathematics Reception.

EYFS Statutory Educational Programme for Mathematics (2021)

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Aspects of Mathematics

Mathematics is made up of the following aspects:

- **Number**
- **Numerical Patterns**

Aims and Objectives

At Breadsall C of E Primary School we aim to:

- Provide lively and engaging activities to enable the children to enjoy and feel confident about mathematics.
- Enable children to develop their mathematical understanding through a wide range of experiences including stories, songs, games and imaginative play.
- Encourage children to explore real-life problems in order to become independent thinkers.
- Enable children to use the appropriate vocabulary and methods of representation to communicate mathematical ideas.
- Use ICT, interactive whiteboards and selected mathematical programs to enhance learning experiences.
- To prepare children to access the Year 1 Mathematics curriculum with confidence
- To achieve the Early Learning Goals at the end of their Reception year, which are as follows:

ELG: Number

- Children at the expected level of development will: -
- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG: Numerical Patterns

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Methodology

- Children experience oral and mental activities, concept building activities and skill development activities as well as investigative work and everyday situations and problems.
- Children have the opportunity to work individually and in groups.
- Children experience a balance between independent activities and adult supported activities
- Children experience a wide range of activities, some of which focus on mathematical learning and some of which enable mathematical learning to be developed.
- Children are given sufficient time, space and encouragement to discover and use new words and mathematical ideas, concepts and language during all aspects of learning.
- Opportunities for mathematical activities occur both indoors and outdoors.

Time Allocation Per Week

We timetable some parts of most days specifically for Mathematics, but because of the overlap between subjects at this stage of development, it is difficult to be precise about the exact time allocated to Mathematics each week.

SEND– see also SEND Policy

- Children are taught in mixed ability groups. Differentiation of work takes place mainly by giving extra help within the classroom to those who require it and by providing more challenging activities where needed.
- Provision is made both for children with learning difficulties and for those with a special aptitude for mathematics to be supported. This takes place during the school day with the learning support teacher or other members of staff.
- Children who require extra support are identified quickly and receive early intervention to help them maintain their progress.

Resources

- The budget for the purchase of resources for the Early Years Foundation Stage is managed by the Headteacher
- Each classroom has a wide range of equipment suited to the age group.
- Power Maths is used in Reception.

Use of IT

- Children have access to a range of computer programs and websites offering games and activities to support the Mathematics curriculum.
- There is also an interactive whiteboard in each classroom.
- The teachers and children have access to class cameras to record experiences.

Assessment and Reporting

- Ongoing assessment based on observations.
- Parents are seen daily when they deliver their child to the classroom or pick them up at the end of the day, and this time can be used to chat informally about any aspect of a child's day at school.
- Parents are invited a termly parent teacher meeting to discuss the EYFS Learning Journey/Profile and associated evidence.
- Parents receive a written report at the end of the Summer Term.
- Recording is done in mathematics scheme workbooks, on teacher prepared sheets and books, in exercise books and other methods of mark making.

Progression of Skills in Reception for Mathematics

Mathematics	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	ELG
Power Maths	Numbers to 5 - Count reliably to 5 and recognise the numerals 1, 2, 3, 4 and 5. Begin to recognise different representations of numbers up to 5. Subitise. Comparing Groups within 5 Know language of more and fewer by comparing groups of up to 5 objects presented in different ways. Know that groups of objects can have the same amount in them, even if	Change within 5 - Find one more and one less than a number within 5 Number bonds to 5 – Use part whole model to represent number bonds to 5 Shape and Space – use positional and directional language Time: to know the language of Time eg first, next, then	Numbers to 10 – count to 10 and represent numbers using concrete and pictorial representations Comparing numbers within 10 – identify more or less than a number up to 10, introducing the concept of addition by combining two groups of objects and of subtraction as the difference between two amounts. Addition to 10- part-whole model. Addition	Number Bonds to 10 . Use ten frame and part whole model to explore number bonds to 10. Recognise the commutative law of addition. Introduction of missing parts as precursor to subtraction. Subtraction – Use part-whole models to 'break apart' 10 and identify the different bonds created. Begin to 'find a missing part' of subtraction from 10. Begin to understand the inverse relationship	Counting on and Counting Back – count forwards or back from a given number to add or subtract Numbers to 20 – Count to 20 and back to 0. Identify one more or one less. Compare and represent numbers to 20. Begin to understand tens and ones. Numerical Patterns – Begin to understand the mathematical patterns of doubling,	Shape – Know that 2 D shapes can be made up of other shapes. Use shapes to make new shapes Measure – Capacity. Know how to compare and measure volume and capacity by investigation. Sorting – sort objects into groups according to size, shape, colour. Notice similarities and differences. Time: Being to know the Months of the Year eg identify month	Number Have a deep understanding of number to 10, including the composition of each number; - Subitise (recognise quantities without counting) up to 5. Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. Numerical Patterns.

	they look different. Shape: 2D and 3D shapes – Describe and compare 2D and 3D shapes.		as the combining of two parts into a whole. Vocabulary <i>-altogether</i> Measure. Length, Height and Weight – use non standard measures to compare items Time: know the Days of the week	between addition and subtraction. Patterns – extend, complete and explain simple repeating patterns. Money - Use money during role play activities to buy items. Use 1p, 2p and 5p coins.	halving, odd and even numbers. Money recognise 10p coin. Explore how to make different amounts using 1,2,5 and 10 p coins. (links to Numbers to 20)	of own birthday. Able to say the time - O’Clock on a digital and analogue clock.	Verbally count beyond 20, recognising the pattern of the counting system. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.
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