# CLERVAUX NURSERY SCHOOL

**EARLY YEARS FOUNDATION STAGE CURRICULUM**

**MATHEMATICS**

**Sept 2022**

**HOW IMPORTANT IS IT?**

**Mathematical development** involves helping children to develop a strong grounding in number, which supports their ability to count confidently and develop a deep understanding of numbers to 10, the relationships between them and the patterns within those numbers. By providing opportunities to build and apply this understanding, children will develop a secure base of mathematical knowledge and vocabulary. Furthermore, it is our intention that the children at Helen Gibson Nursery School will develop the necessary skills to become problem solvers, logical thinkers and be aware of mathematical terminology in the early years. In addition to this, our curriculum includes frequent and varied opportunities for the children to develop their special reasoning skills across all areas of mathematics including shape, space and measures. Although we recognise this as being one of the Specific areas of learning, mathematics is a key skill needed for future life, not only in school but beyond this and in everyday life.

At Helen Gibson Nursery School, we feel it is vital for children to develop a love of mathematics. It is a fundamental part of life and helps to support the Every Child Matters statements of helping children to enjoy and achieve, achieve economic wellbeing and make a positive contribution to life in modern Britain.

**AIMS / OBJECTIVES FOR MATHEMATICS IN THE NURSERY**

###  AIMS

At Helen Gibson Nursery School, we aim to provide a numeracy rich environment in which children can enjoy and learn about number, shape, space and measure. We aim to support every child at the level they are to ensure that they fulfil their potential in Mathematics to become confident mathematicians throughout their school life. This must exist to enable learning to take place successfully.

**OBJECTIVES**

1. To provide a high profile of numbers, shape, space and measure in many varied forms.
2. To ensure that mathematics is fun, interesting and exciting.
3. To ensure children develop and practice skills in numeracy.
4. To ensure children have the opportunity to develop an interest in numeracy both indoors and out.
5. To foster links relating to numeracy with feeder schools.
6. To have effective resources to support all stages of learners.
7. To ensure staff have a clear understanding of what is meant by numeracy as it relates to the young child.
8. To share with parents the ways in which they can help with the numeracy aspects of their child’s education; informative talks by teachers, making a variety of library maths games resources easily available, workshops, sharing of learning journals etc.

**CREATING AN ENVIRONMENT FOR MATHEMATICAL DEVELOPMENT**

To create a positive environment we need to -

* Make sure every child is given time to explore: number, shape, space and measure both inside and out of the nursery.
* Ensure that throughout the daily routine mathematical opportunities are on offer to the children both inside and outside of the nursery environment, as the nursery operates a free-flow system.
* To ensure that every child has a keyworker who understands where the child is in their learning and plans next steps within the mathematics outcomes. Individual child observations coupled with next steps to learning are recorded into each child’s Learning Journal by the keyworkers.
* Encourage children to play games, solve problems, count, recognise numerals, explore shapes, understand size and measure and use their own methods to record number which will develop into being able to record by writing numerals. For example - At Welcome Time, the Special Helpers’ are encouraged to calculate how many children are in their group, and how many are missing. The children are then supported and invited to find the corresponding numeral and have a go at copying it.
* Encourage an enjoyment of number through making it as fun as possible and incorporating real life experiences to support its further development. For example- the children use tally/number charts whilst calculating which children would like milk or water at snack time.
* Provide a range of opportunities for problem solving to take place and a range of resources to support this, which are exciting. For example - play matching pairs with transport cards.
* Develop the children’s confidence and independence in number, shape, space and measures. For example - using shape or number at planning time.
* Support children with their early mathematical skills including understanding numbers which are significant to them, singing number rhymes, recognising simple shapes, comparing two objects and sorting. For example - at Large Group Time the children are encouraged to join in with a variety of number rhymes and play games such as corners which include the four basic 2D shapes.
* Ensure that numbers are everywhere and promote a culture of using them for a purpose.
* Ensure that we recognise the stages of where children are at and put steps in place to ensure continuous progress.
* Provide a range of activities to support the development in all areas of the nursery. For example - scales in the house area and tape measure in the building area to develop an understanding of measure or encouraging children to record how many children are staying for lunch that day in their key group.

**ACTIVITIES PLANNED TO DEVELOP MATHEMATICAL DEVELOPMENT SHOULD:**

* Be appropriate for age and level of development of children and move at their own pace.
* Allow children to develop a love of numbers and encourage children to be enthusiastic in solving their own problems in a caring and supporting environment.
* Provide ample opportunities for children to count, explore shape, space and measures and share their findings with others.
* Provide challenges in order to develop children’s thinking further.
* Allow children to develop their own interests and provide resources to support i.e. lotto games based around their interest of super heroes etc.
* Allow children time to explore using natural and manmade resources e.g. measuring with sticks or sorting using flower petals.
* Give children a wide variety of experiences both familiar and unfamiliar i.e. sorting socks with patterns at planning time.

**EXPERIENCES CAN BE PRESENTED IN THE CURRICULUM IN A RANGE OF WAYS INCLUDING:**

* Through opportunities to count, record, use measurement and explore shape in the role-play area i.e. how many cups of tea someone would like in the café.
* Use of the whole nursery to ensure a love of mathematics becomes a fundamental part of their lives through planning exciting activities, interactive displays, the use of shadows for labelling etc.
* Through the use of a wide range of equipment, both natural and manmade, inside and out.
* Having daily routines in place to provide opportunities to work with adults, other children and develop mathematics.
* Working in small groups, large groups and 1:1 to encourage a knowledge of number, counting, simple addition and subtraction.
* Working in small groups, large groups and 1:1 to encourage a knowledge of shapes, space and measures.
* High level links with home via Learning Journals, home visits, parent meetings, stay and play sessions and Sharing Week.

**PLANNING FOR MATHEMATICAL DEVELOPMENT**

**General Plans**

Mathematics is part of the Specific areas of learning. It is discussed as a whole staff during daily reflections and planning time. We ensure that plans are put in place to support all learners at all stages to ensure that every child makes the best progress they can throughout the year.

**LIAISON WITH INFANT FEEDER SCHOOLS**

We liaise with our feeder schools to ensure that all relevant information regarding Mathematics development of individuals are passed on. This ensures a smooth transition for all children and enables them to feel safe and secure in their new setting giving them greater confidence to engage in learning.

Signature of Chair of Governors: ……………………………………………………….

Signature Of Head Teacher ..................................................................................

Date ...............

REVIEWED : Sept 22

NEXT REVIEW : Sept 24