

Policy:	MATHEMATICS POLICY
Reviewed:	January 2017
Next Review:	Three years, or as legislation may require
Responsibility:	Head of Education and Care
Category:	Curriculum Policies

■ The Role of Mathematics

Babies' and children's mathematical development occurs as they seek patterns, make connections and recognise relationships through finding out about and working with numbers and counting, with sorting and matching and with shape, space and measures' (EYFS).

Through maths children are encouraged to develop their knowledge and skills to solve problems, ask questions and make connections across all areas of learning and development.

■ Centre Aims

The Centre aims to develop mathematical skills and understanding through offering a broad range of contexts and giving children the time and opportunity to practise their skills and gain in confidence.

We aim to develop mathematical skills and language through activities across all areas of learning and development, for example:

- Stories, songs and rhymes involving numbers and mathematical concepts.
- Using numbers in games, both indoors and outside.
- Recreating real life situations through role-play.
- Practical activities such as baking.
- Sharing, sorting and counting at snack time.

Effective Learning in Mathematics involves:

- Using mathematical language in everyday activities and child initiated play.
- Using mathematical ideas and methods to solve problems in everyday activities such as sharing out snack.
- Identifying and talking about numbers, shapes and patterns in the environment.
- Making comparisons, for example in length or quantity.
- Sorting and matching objects.

Effective Teaching in Mathematics involves:

- Helping children to see themselves as mathematicians, and develop positive attitudes and dispositions towards their learning.
- Developing children's natural interest in numbers, measuring and shapes, aroused by interaction with their environment and with other people.
- Providing enjoyable and meaningful activities and experiences, building on what the children know, understand and are able to do.
- Providing everyday contexts for purposeful mathematics.

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- Planning for mathematical opportunities in all areas of learning.
- Making good use of opportunities to use mathematical language as children play or take part in normal daily activities.
- Ensuring that mathematical resources are readily available both indoors and outside.
- Developing children's thinking by showing an interest in methods, not just solutions.

■ **Monitoring and Evaluation**

The methods of monitoring and evaluating the teaching and learning in Mathematics include:

- Planning reviewed by the Mathematics Co-ordinator.
- Assessment data analysed each term by the Teachers and information passed to the Senior Management Team.
- Access to mathematical activities monitored by sampling on a regular basis.
- Quality of observations and Learning Journeys reviewed regularly by Team Leaders and Teachers.
- Moderation by Teachers of assessments and Learning Journeys.

■ **Planning**

All services across the Centre plan their learning experiences based on observations of children's next steps and interests. Mathematics consists of two areas:

- ◆ Numbers
- ◆ Shape, Space and Measure

Team Leaders and Practitioners should ensure that both of these areas are covered every half term.

Long-Term Planning

Provides for all aspects of Mathematics to be covered over the year and the children.

Medium-term Planning

Using the long-term plan, observations, assessment data and the children's interests and next steps, the teachers and team leaders identify areas of focus for the half-term.

Short-term Planning

Learning experiences are planned for each week/daily, based on the observed needs and interests of the children and feedback from parents.

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These are designed to build upon and extend children's knowledge, understanding and skills in this area and promote positive attitudes to learning.

Focussed Child Planning (Nursery School)

A key person will choose a child to 'focus' their observations and planning on for one week. These observations and the children's next steps /interests will be planned for through the short-term planning.

■ **Observation and Assessment**

Observations may take different forms:

- A practitioner may note a child's interest in a specific activity or resource.
- Observations may be made during an adult-led or focused activity.
- Parents are encouraged to share their own observations and assessments of their child's progress.

Both formative and summative assessments are made:

- Formative assessment through ongoing observation.
- Summative assessments are shared with parents each term, in the Two Year Progress Report and at the end of the Nursery School year.

Achievements and progress will be noted on the Mathematics Development Assessment sheets. This information will then be input to the assessment tracker.

A child's achievements and interests will be noted in their Learning Journey and shared with parents termly.

The data is analysed once a term by the Teachers, identifying areas for focus.

For further details on observation and assessment, see the 'Observation and Assessment' Policy.

■ **Roles & Responsibilities of the Mathematics Co-ordinator**

The Co-ordinator will carry out the following responsibilities:

- Monitor planning of appropriate activities to promote mathematical development.
- Ensure that clear objectives are set so that Practitioners can observe and assess the children to inform future planning.
- Observe Practitioners and agree any training and development needs.
- Review the Mathematics Policy.

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■ Roles & Responsibilities of all Practitioners

- Ensure that all children have equal opportunities to access mathematical activities.
- Refer to the planning before each session in order to understand the learning intentions of all activities.
- Carry out ongoing observations and assessments of children in order to inform future planning.
- Ensure that resources are adequately cared for and safe to use.

■ Roles & Responsibilities of Parents

- Attend the termly parent meetings to discuss their child's achievements and targets.
- Share their observations and assessments with their child's Key Person.
- Support the Centre by taking opportunities at home to promote the development of mathematical skills.
- Input into their child's 'Individual Plan' / children's next steps on a termly basis.

■ Special Educational Needs

We aim to cater for the individual learning needs of every child, recognising the need for specialised provision to ensure access to all aspects of Mathematics.

See 'Policy for meeting Special Education Needs' for more information.

The Centre has a named Special Educational Needs Co-ordinator (SENCo) who works across the Centre.

The SENCo links with external agencies such as the Educational Psychologist, the special needs team, the Early Year's Behavioural Team, speech therapists and health visitors. The SENCo, Practitioners and outside agencies work together with parents to form Targeted Learning Plans (TLPs) for children.

Parents and Carers work with Practitioners, the SENCo and outside agencies in supporting the child's progress at the Centre.

Information about the child's development may be shared with other settings attended by the child, with parental consent.

■ Able, Gifted and Talented

We aim to provide for the needs and interests of all our children through the observation, assessment and planning process. This process enables us to identify those children who are high achievers in any or all areas of learning and development.

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Practitioners, supported by the Teachers where appropriate, ensure that activities are suitably challenging to enable children to reach their full potential.

■ Equal Opportunities

All children and families are encouraged to take part in all activities at the Centre. We actively celebrate cultural differences, and recognise the importance of treating children equally and with respect.

Boys and girls are treated equally and encouraged to take part in all aspects of Mathematics.

■ Managing Resources

- The Practitioners and Mathematics Co-ordinator will, through planning, observation and assessment, identify new resources which will support teaching and learning.
- Any loss or damages must be reported to the Mathematics Co-ordinator, who will then identify resources that need replacing.
- The asset management file contains a complete list of resources that we have within the Centre and this should be updated when new resources are purchased.

■ Dissemination

This policy is available for all parents, Governors, staff and prospective parents.

■ Review Procedure

This policy will be reviewed every three years by the Mathematics Co-ordinator, the Head Teacher and the Governors.